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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,564	03/20/2001	Alex Elkin	527922000100	9241

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EXAMINER
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ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/811,564	<b>Applicant(s)</b> ELKIN ET AL.	
	<b>Examiner</b> Akiba K. Robinson-Boyce	<b>Art Unit</b> 3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/15/06 has been entered.

### ***Status of Claims***

2. Due to communications filed 8/15/06, the following is a non-final office action. Claims 1, 2, 7, 15, 26 and 27 have been amended. Claims 1-33 are pending in this application and have been examined on the merits. The previous office action has been withdrawn, and the following reflects the claims as amended. Claims 1-33 are rejected as follows.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Flores et al, (US 5,734,837).

As per claim 26, Flores discloses:

A system for graphically designing a business process, and directly implementing the graphically designed business process, (Abstract, lines 6-11, shows system can be implemented using graphical tools, w/ Col. 6, lines 11-15, shows a GUI application that allows a business process designer to specify the business process design) comprising:

(a) a process designer tool having a graphical interface for defining a business process model in a top-down method, (col. 5, lines 39-52, programming interface, w/ col. 7, lines 49-55, shows graphical user interface is implemented, w/ col. 32, lines 32-35 shows a process where passing to top level occurs);

the business process model having

(i) at least one process having control flow defined between at least two components, (Fig. 2a, shows workflow model with links, w/ col. 8, lines 26-30, shows link definitions); and

(ii) at least one task having a definition, each task definition incorporating a user interface for performing the task and defining access to business data in the form of structured events required to complete the task, the task comprising a unit of work performed by a computer program (Col. 33, lines 49-58, task calls forms and views generation module for the user interface, w/ Col. 7, lines 34-36, shows workflows are a structured set of acts between customers and performers, where workflows are used to complete a business process map as shown in the abstract); and

(b) a process server capable of deploying and executing the process model by following the control flow defined in the process, transferring and transforming data between the process and process components and presenting to at least one end user

the defined task via the user interface, (Col. 4, line 48-col. 5, line 14, workflow server, w/ Col. 12, lines 10-11, shows the transfer of business process and workflow information to the Definitions database).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guheen et al (US 6,615,166), and further in view of Flores et al (US 5,734,837).

As per claim 1 Guheen et al discloses:

A method for graphically defining business processes, (Col. 96, lines 25-31, shows data modeling tools provide a graphical depiction of business being modeled), and directly implementing the graphically defined business processes to a level of detail enabling immediate and automatic execution of the business processes by a computer system, (Col. 72, lines 45-49, shows workflow management tools provide the ability to execute automated business processes), comprising:

a) adding components to a process definition, including at least one task requiring user interaction, the task comprising a unit of work performed by a computer program, (col. 40, lines 20-62, shows process definition consist of standards involving components);

b) defining interface elements for the task...(col. 61, lines 36-47, design of user interfaces);

c) defining control flow between the components of the process definition, (col. 101, lines 9-13, control flow);

defining data transformation between the control flow and individual tasks, (Col. 98, lines 32-40, shows that physical constructs such as transforming a logical model into a physical model, database definition, index definition, etc. must be supported for developing physical data design, and should support entity definition, attribute definition, etc. if developing a logical data model)

submitting the process definition...submission of the at least one task for end users via the defined interface elements, (Col. 273, lines 35-67, integrating WAF functionality into commercial and user applications, where the end-user implements the WAF application which is shown to have a plurality of templates for different tasks).

Guheen et al does not specifically disclose events with defined data structures, but does disclose a network example where an application is provided to proxy services and spreads tasks among servers in Col. 252, lines 23-31.

However, Flores et al discloses:

events with defined data structures, (Col. 80, lines 8-47, shows list of defined data structures). Flores et al discloses this limitation in an analogous art for the purpose of showing that data structures are defined and used for building business process applications.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have events with defined data structures with the motivation of having event definitions for interface elements.

Guheen et al does not specifically disclose a process server, but does disclose a network example where an application is provided to proxy services and spreads tasks among servers in Col. 252, lines 23-31.

However, Flores et al discloses:

a process server for execution of the control flow, (Col. 4, line 48-col. 5, line 14, workflow server). Flores et al discloses this limitation in an analogous art for the purpose of showing the computer means used to execute workflow commands.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to submit the process model to a process server for execution of the control flow with the motivation of implementing the workflow in an application.

As per claim 2, Guheen et al discloses:

e) defining data flow between components of the process definition, (Col. 101, lines 35-40, data flow diagramming).

As per claim 3, Guheen et al discloses:

wherein at least some of the components have events which can be either an action or a result, and further wherein control flow is defined at least in part by linking a result of one component to an action of a second component, (col. 101, lines 9-20, dataflow has one output and can be shared with other systems, w/ col. 116, lines 18-25, dataflow diagrams show links).

As per claim 4, Guheen et al discloses:

wherein certain components are contained within other components, (Col.14, lines 18-20, subcomponents).

As per claim 5, Guheen et al discloses:

wherein the components have attributes, (Col. 14, lines 20-30, indicia coding to represent services or that component, w/ col. 98, lines 17-29, data model attributes).

As per claim 6, Guheen et al discloses:

wherein the process of defining data flow comprises the associating of the attributes of a component containing another component with the attributes of the contained component, (Col. 101, lines 15-20, each attribute must have one input flow associated with it).

As per claim 7, Guheen et al discloses:

A method of graphically generating an enterprise application, (Col. 96, lines 25-31, shows data modeling tools provide a graphical depiction of business being modeled), and directly implementing the graphically generated enterprise application to a level of detail enabling immediate and automatic execution of business processes by a computer system, , (Col. 72, lines 45-49, shows workflow management tools provide the ability to execute automated business processes), comprising the steps of:

(a) identifying a plurality of building blocks that define a workflow process, each building block being representative of a step in the workflow process, (Col. 40, lines 21-25, define processes for data how to perform and produce at each step);



(b) sequencing and connecting together the plurality of building blocks to create a workflow process model, (Col. 110, lines 1-7, workflow/sequence diagrams);

(c) defining at least one task to be accomplished within at least one of the building blocks, the task comprising a unit of work performed by a computer program, (col. 40, line 55, defining procedures that specify how to perform a task);

(d) associating data with the at least one task, (Col. 41, lines 31-38, referring standards, procedures, etc. to a set of tasks);

(f) generating on the process server a client application accessible to users, (Col. 273, lines 35-67, integrating WAF functionality into commercial and user applications, where the end-user implements the WAF application which is shown to have a plurality of templates for different tasks).

Guheen et al does not specifically disclose a process server, but does disclose a network example where an application is provided to proxy services and spreads tasks among servers in Col. 252, lines 23-31.

However, Flores et al discloses:

(e) loading the workflow process model on a process server, (Col. 4, line 48-col. 5, line 14, workflow server). Flores et al discloses this limitation in an analogous art for the purpose of showing the computer means used to execute workflow commands.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to load the workflow process model on a process server with the motivation of implementing the workflow in an application.

As per claim 8, Guheen et al discloses:

wherein each building block is comprised of at least one of a component and resource, (Col. 14, lines 18-21, various components).

As per claim 9, Guheen et al discloses:

wherein the component is comprised of at least one of a container and an element, (Col. 28, lines 57-59, elements).

As per claim 10, Guheen et al discloses:

wherein the container is comprised of at least one of a process, a task, a router and a controller, Col. 41, lines 31-38, referring standards, procedures, etc. to a set of tasks).

As per claim 11, Guheen et al discloses:

wherein the element is comprised of at least one of a view, a join, a comparator, a timer, an assigner, a notifier, an action-launcher, an adapter and a locker, (col. 28, lines 57-59, windows represents the action-launcher).

As per claim 12, Guheen et al discloses:

wherein the resource is comprised of at least one of a business entity a role, a user, a calendar, a decision criteria and a data controller, (Col. Col. 6, lines 60-64, customer represents user).

As per claim 13, Guheen et al discloses:

wherein step (b) comprises graphically displaying the building blocks, (Col. 117, lines 48-54, graphical representation tools).

As per claim 14, Guheen et al discloses:

wherein the task comprises a unit of work performed by a computer program, (Col. 27, lines 53-58, computer program).

6. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flores et al (US 5,734,837), and further in view of Leymann et al (US 7,024,670).

As per claim 15, Flores discloses:

A method of graphically defining a...workflow process and directly implementing the graphically defined top-down workflow process to a level of detail enabling immediate and automatic execution of the process by a computer system, (Abstract, lines 6-11, shows system can be implemented using graphical tools, w/ Col. 6, lines 11-15, shows a GUI application that allows a business process designer to specify the business process design), comprising the steps of:

(a) identifying top level process steps in the workflow process, (col. 32, lines 32-35, passes to top level, therefore inherent to first identify top level);

(b) selecting graphically displayed building blocks to represent each of the top level process steps, (col. 7, lines 49-55, graphical user interface w/col. 8, lines 31-36, workflows are graphically represented as loops);

(c) arranging and connecting the building blocks to create a top level workflow process model, (Fig. 2a);

(d) determining which of the top level process steps in the top level workflow process model are amenable to sub-process steps, (Col. 22, lines 6-10, subprocess);

(e) for each top level process step identified in step (d), selecting further building blocks to represent the sub-process steps and associating the thus-selected building

blocks with the respective top level process step identified in step (d), (Col 22, lines 19-28, subprocess begins with a link and goes to workflow, etc.);

Flores fails to disclose top-down methodology, but does disclose building blocks through a workflow model in Fig. 2a).

However, Leymann et al discloses:

top-down methodology, (Col. 7, lines 57-64, top-down implemented). Leymann et al discloses this limitation in an analogous art for the purpose of showing that top-down methodology can be implemented to offer greater flexibility for process definition.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize top-down methodology with the motivation of incorporating top-down methods into a workflow.

Flores fails to disclose Flores fails to disclose (f) associating non-control data with at least a portion of the building blocks, but does disclose building blocks through a workflow model in Fig. 2a).

However, Leymann et al discloses:

(f) associating non-control data with at least a portion of the building blocks, (Col. 7, lines 48-54, shows blocks contain activities, control connectors, etc, and that blocks contain the same constructs a processes). Leymann et al discloses this limitation in an analogous art for the purpose of showing that non-controlled data can be incorporated into a workflow process.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to associate non-control data with at least a portion of the building blocks with the motivation of incorporating non-control data into a workflow.

Flores fails to disclose (g) loading the building blocks and at least a portion of the non-control data on a process server, (h) running the top level workflow process model using a computer, including any associated sub-process steps, but does disclose building blocks through a workflow model in Fig. 2a).

However, Leymann et al discloses:

(g) loading the building blocks and at least a portion of the non-control data on a process server/(h) running the top level workflow process model using a computer, including any associated sub-process steps, (col. 8, lines 48-50, shows all information about current state of process [including all process and block information since blocks contain the same constructs as processes] is stored in a database maintained by the server/Col. 5, lines 56-58, shows a fully automated workflow, w/ col. 3, lines 7-10 shows computerized method). Leymann et al discloses this limitation in an analogous art for the purpose of showing that non-control data can be implemented in a workflow and executed.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to load the building blocks and at least a portion of the non-control data on a process server and to run the top level workflow process model using a computer, including any associated sub-process steps with the motivation of executing non-control data.

As per claim 16, Flores discloses:

wherein each building block is comprised of at least one of a component and resource, (col. 82, lines 23-25, component representation).

As per claim 17, Flores discloses:

wherein the component is comprised of at least one of a container and an element, (Col. 24, lines 58-60, elements).

As per claim 18, Flores discloses:

wherein the container is comprised of at least one of a process, a task, a router and a controller, (Col. 82, line 16, business process).

As per claim 19, Flores discloses:

wherein the element is comprised of at least one of a view, a join, a comparator, a timer, an assigner, a notifier, an action-launcher, an adapter and a locker, (col. 5, lines 30-33, views).

As per claim 20, Flores discloses:

wherein the resource is comprised of at least one of a business entity, a role, a user, a calendar, a decision criteria and a data controller, (Col. 3, lines 16-17, roles).

As per claim 21, Flores discloses:

wherein the building blocks are graphically wired together, (Abstract, lines 7-9, graphical tools).

As per claim 22, Flores discloses:

wherein step (f) comprises mapping data, (Abstract, lines 7-9, map out business process).

As per claim 23, Flores discloses:

further comprising modifying sub-process steps within a connected building block, (Fig. 2a).

As per claim 24, Flores discloses:

further comprising making the building blocks available to users via a process design server, (Abstract, lines 1-6, unified tool, w/ col. 5, lines 39-52, program initiated to access services of the workflow server).

As per claim 25, Flores discloses:

further comprising requesting a person having particular knowledge about one or more of the sub-processes to assist in selecting and arranging building blocks representative thereof, (col. 6, lines 7-9, particular STF processor developer).

7. Claims 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flores et al (US 5,734,837), and further in view of Guheen et al (US 6,615,166).

As per claim 27, Flores discloses:

A system for graphically creating a process model and directly implementing the graphically created process model for an enterprise, (Abstract, lines 6-11, shows system can be implemented using graphical tools, w/ Col. 6, lines 11-15, shows a GUI application that allows a business process designer to specify the business process design), comprising:

a process designer comprising a graphical user interface used to develop components and resources and to define process flow and data flow among said components and resources, the process designer being capable of defining at least one

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procedure associated with at least one of said components and resources, (col. 5, lines 39-52, programming interface, w/ col. 7, lines 49-55, shows graphical user interface is implemented);

a process server for running the at least one procedure, (Col. 4, line 48-col. 5, line 14, workflow server); and

a process client comprising a graphical user interface operable to allow end users to log on and connect to the process server, to access any assigned tasks and to perform said assigned tasks, col. 5, lines 39-52, workflow APIs that provide a programming interface, w/ col. 7, lines 49-55, shows graphical user interface is implemented).

Flores et al does not disclose assigning tasks in accordance with a priority scheme defined in the process designer, the task comprising a unit of work performed by a computer program, but does disclose the generation of business process definitions by a process designer in the abstract, lines 6.

However, Guheen et al discloses:

assigning tasks in accordance with a priority scheme defined in the process designer, the task comprising a unit of work performed by a computer program, (Col. 292, lines 47-50, prioritizing components according to defined indicia coding). Guheen et al discloses this limitation in an analogous art for the purpose of prioritizing components required for the implementation of a predetermined technology.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to assign tasks in accordance with a priority scheme defined in the



process designer, the task comprising a unit of work performed by a computer program, with the motivation of implementing the components of a workflow in a specific order.

As per claim 28, Flores discloses:

wherein the process designer presents a plurality of building blocks to a user, (Fig. 2a).

As per claim 29, Flores discloses:

further comprising a system administrator in communication with the process server, (col. 24, line 64, administrator).

As per claim 30, Flores discloses:

wherein the assigned tasks are performed by a computer, (col. 82, lines 13-16, computer).

As per claim 31, Flores discloses:

wherein the process designer makes developed components and resources available for use in other process models, (col. 71, lines 59-65, provide an additional user interface to design views).

As per claim 32, Flores discloses:

further comprising means for defining a common user interface among the components and resources, (col. 5, lines 39-40, provide a programming interface).

As per claim 33, Flores discloses:

further comprising means for mapping data between components, between resources and between components and resources, (Abstract, lines 7-9, graph tools to map out the business process).

***Response to Arguments***

8. Due to the amendment filed 6/16/06, the 35 U.S.C. 112 rejection has been withdrawn by the examiner.

9. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed 6/16/06 have been fully considered but they are not persuasive.

The applicant argues that as amended, prior art does not allow a single software application to both graphically define and directly implement business processes from the top-down. However, the combination of Flores et al and Leymann et al disclose this limitation. Flores discloses building blocks through a workflow model in Fig. 2a, while Leymann et al discloses the processing of start conditions of activities within a process model processable by a Workflow Management System that incorporates a top-down methodology to offer greater flexibility for process definition as shown in Col. 7, lines 57-64.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 571-272-6734. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-746-7238

[After final communications, labeled "Box AF"], 703-746-7239 [Official Communications],

and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

A handwritten signature in black ink, appearing to read "A. R. B. Boyce". The signature is fluid and cursive, with the first name "A. R. B." and the last name "Boyce" clearly distinguishable.

A. R. B.

September 28, 2006